

S P E C I F I C A T I O N S



Stadia™ II

High Performance Two-Way
Weather-Resistant
Speaker System

Frequency Response:

58 Hz - 18 kHz ± 3 dB

Low Frequency Limit (-3 dB point):

58 Hz

**Useable Low Frequency Limit
(-10 dB point):**

45 Hz

Power Handling:

200 watts continuous (40 V RMS)

400 watts program

800 watts peak

**Sound Pressure Level, 1 Watt at 1
Meter Swept Sine Input In Anechoic
Environment:**

94 dB

Maximum Sound Pressure Level:

114 dB

Radiation Angle Measured at -6 dB**Point of Polar Response:****Horizontal Plane:**

500 Hz - 1.6 kHz

$120^\circ \pm 30^\circ$

1,600 - 5,000 Hz

$65^\circ \pm 20^\circ$

5,000 - 16,000 Hz

$70^\circ \pm 15^\circ$

Vertical Plane:

500 Hz - 1.6 kHz

$115^\circ \pm 20^\circ$

1,600 - 5,000 Hz

$60^\circ \pm 20^\circ$

5,000 - 16,000 Hz

$50^\circ \pm 15^\circ$

Directivity Factor Ro(Q)

500 Hz - 16,000 Hz Median:

8.3 +10.7, -5.5

Directivity Index (Di))

500 -16,000 Hz Median:

9.2 dB +3.6 dB, -4.7 dB

Transducer Complement:

One 12" heavy -duty weather-resistant low frequency speaker, one Peavey CDH-90 constant directivity dynamic horn tweeter

Closed Box Resonance:

78 Hz

Electro -acoustic Crossover**Frequency:**

3.2 kHz

Crossover Type:

Two-way internal passive

Electrical Crossover Slope:

1st order low pass to woofer
(6 dB/oct.)

2nd order high pass to tweeter
(12 dB/oct.)

Impedance (Nominal):

8 ohms

Impedance (Minimum):

7.9 ohms

Input Connections:

Screw terminals

Enclosure Materials and Finish:

Molded polyethylene with a light pebble finish and perforated metal 3-D grille. Unit available in black (with black grille) or white (with white grille.)

Mounting:

Stand mounting via built-in stand adaptor, two mounting points (one on left side and one on top) compatible with the Peavey Versamount™ 70 and the Omnimount® Series 100 hardware.

Dimensions:

14" W x 21" H x 11 3/4" D in front

8 1/4" W x 19 1/2" H in rear

Net Weight:

31 lbs.

Additional Remarks:

Unit is weather-resistant. Woofer features Kevlar™ impregnated cone. Hi-fi voicing.

*Omnimount® is registered
trademark of Omnimount
Systems, Inc.*



PEAVEY®

Harmonic Distortion:

At 1/100 rated power (2 watts):

| | |
|-----------|--------------------------------|
| 2nd Harm. | 100 Hz, 0.9%, 1 kHz, 0.25% |
| 3rd Harm. | 100 Hz, 0.35%, 1 kHz, 0.22% |

At 1/10 rated power (20 watts):

| | |
|-----------|-------------------------------|
| 2nd Harm. | 100 Hz, 3.2%, 1 kHz, 0.32% |
| 3rd Harm. | 100 Hz, 2.2%, 1 kHz, 0.25% |

FEATURES

- * Molded plastic trapezoidal enclosed
- * 3-D perforated metal grille
- * 12" heavy-duty Kevlar® impregnated woofer
- * 1" diaphragm constant directivity horn tweeter
- * Weather resistant system
- * Input via screw terminals
- * Reinforced mounting point inserts
- * Stand adaptor molded in
- * High power handling
- * Extended bass
- * Available in black or white cabinets
- * Hi-fi sound
- * Sealed cabinet
- * Impedance: 8 ohms

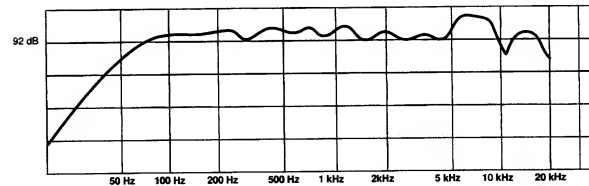
Kevlar® is a registered trademark of DuPont Company

DESCRIPTION

The Stadia™ II is a two-way full-range speaker system engineered to provide high performance in a weather-resistant compact package. The enclosure utilizes molded polyethylene in a trapezoidal shape, along with a 3-D perforated metal grille to provide a cosmetically pleasing yet durable system. The 12" heavy-duty woofer features a Kevlar® impregnated cone, offering extended bass response. A 1" diaphragm constant directivity dynamic horn tweeter handles the high frequencies. Input connection to the system is made using screw-type terminals for long-term reliability, and an internal passive crossover enables high power handling and a smooth response with a hi-fi sound character. The sealed cabinet, available in black or white, offers

Frequency Response

Fig. 1



Impedance

Fig. 2

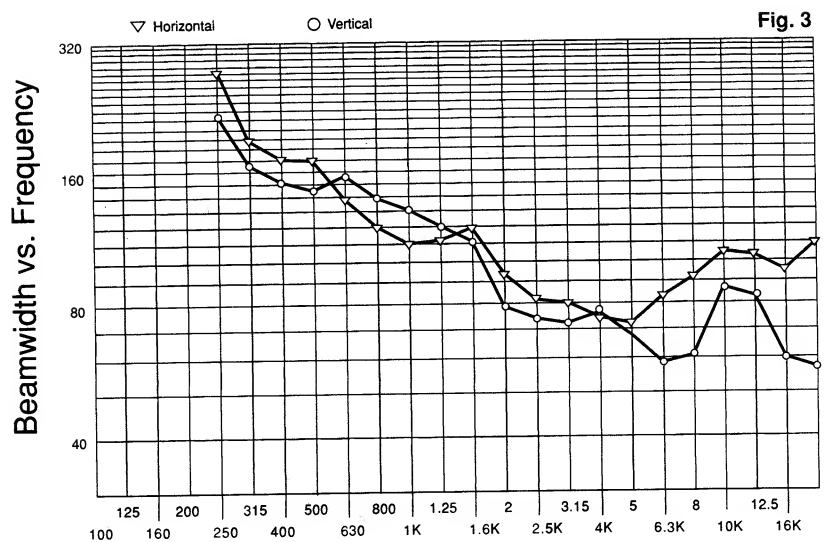
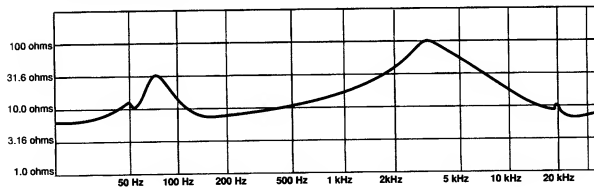
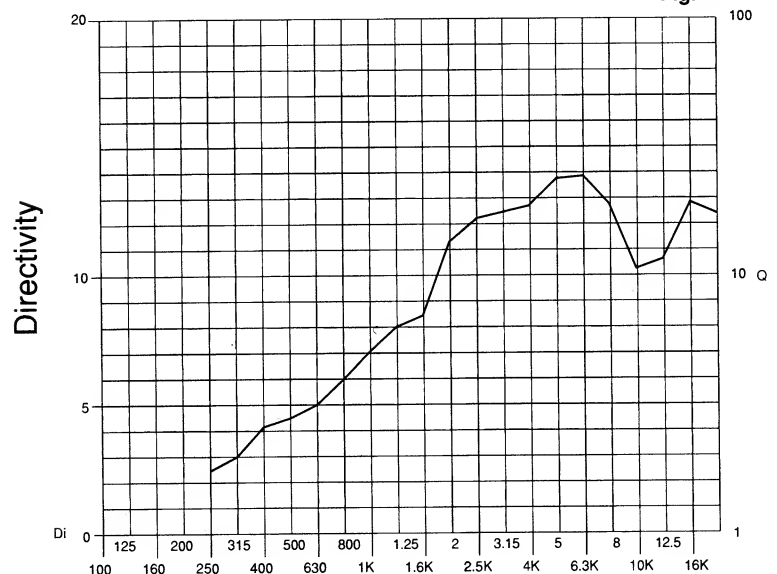


Fig. 4



mounting point inserts reinforced with internal steel braces, as well as a molded-in stand adaptor for maximum utility ease in installation.

DIRECTIVITY

Beamwidth and directivity factors are derived from the -6 dB points from the polar plots, which are measured in a whole space anechoic environment. These are specifications which provide a reference to the coverage characteristics of the enclosure. These parameters provide insight for proper enclosure placement and installation in the chosen environment. The blending of the components of the Stadia II exhibits a desirable beamwidth and directivity factor suitable for all high-level sound reinforcement applications.

FREQUENCY RESPONSE

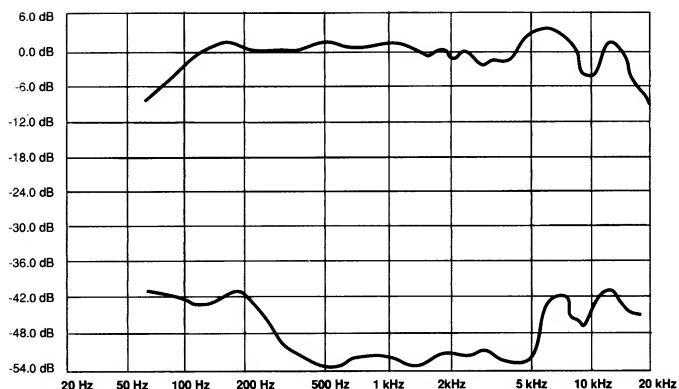
This measurement is useful in determining how accurately a given enclosure reproduces an input signal. The frequency response of the Stadia II is measured at 1 meter using a 2.83 V swept sine input. The selected drivers in the Stadia II combine to give a smooth frequency response from 58 Hz to 18 kHz.

POWER HANDLING

There are many different approaches to power handling ratings. Peavey rates this speaker system's power handling using a modified form of the AES Standard 2-1984. Utilizing audio band (20 Hz - 20 kHz) pink noise with peaks over four times the RMS level, this strenuous test signal assures the user that every portion of this system can withstand today's high technology music. The test signal contains large amounts of very low frequency energy, effectively simulating the frequency content of live music situations. The full measure of high frequencies in the test signal allow for exposure of the speaker system to synthesized tone that may extend beyond audibility. This rating is contingent on having a minimum 3 dB of amplifier headroom available.

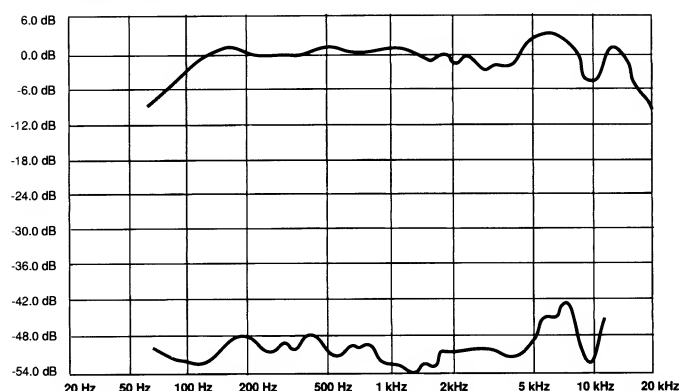
2W 2nd Harm.

Fig. 5



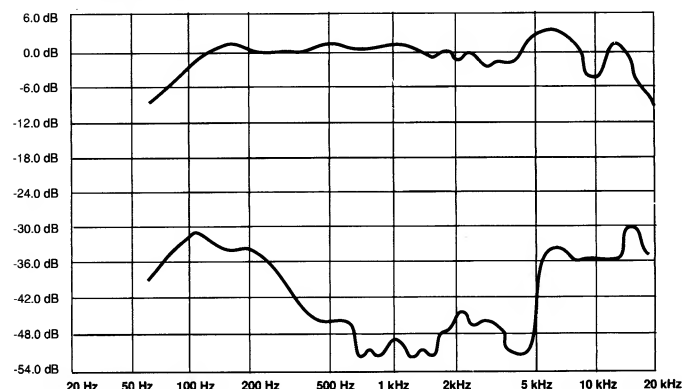
2W 3rd Harm.

Fig. 6



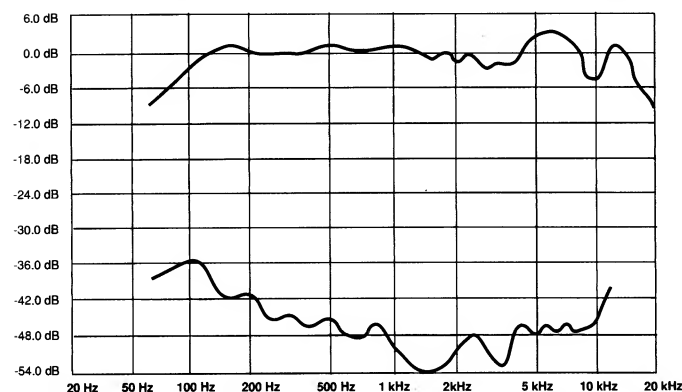
20W 2nd Harm.

Fig. 7



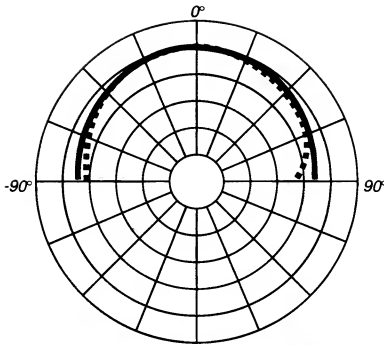
20W 3rd Harm.

Fig. 8

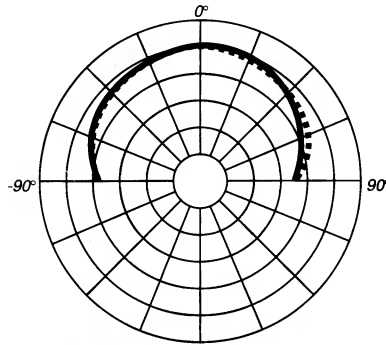


HORIZONTAL POLAR PATTERNS

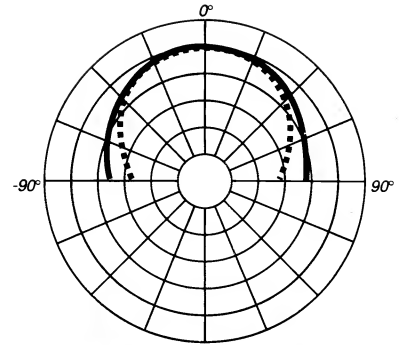
6 dB per division



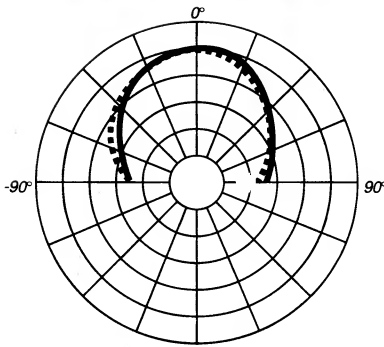
250 Hz —
315 Hz



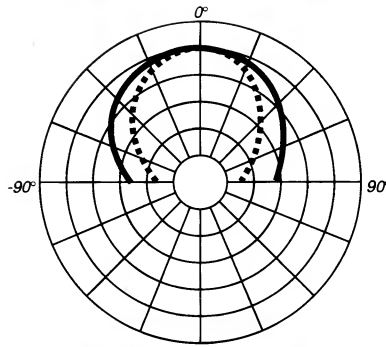
400 Hz —
500 Hz



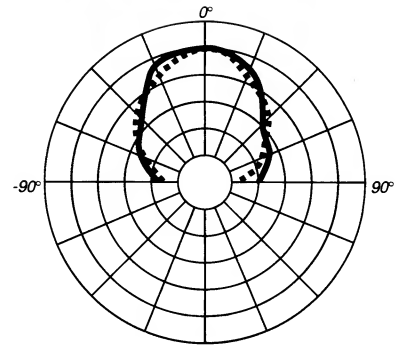
630 Hz —
800 Hz



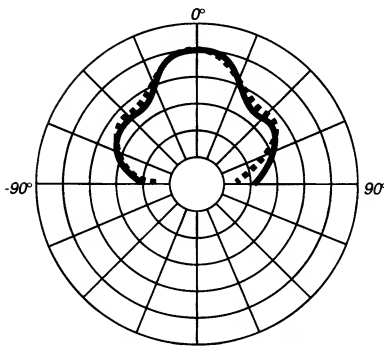
1 kHz —
1.25 kHz



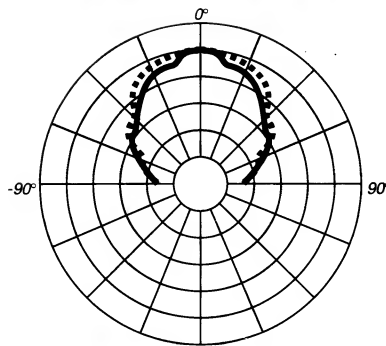
1.6 kHz —
2 kHz



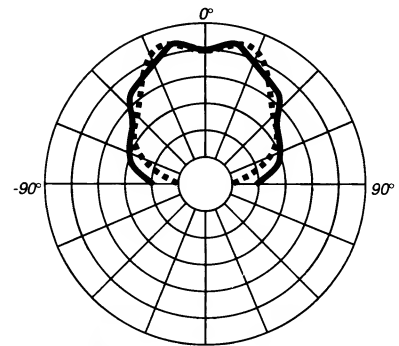
2.5 kHz —
3.15 kHz



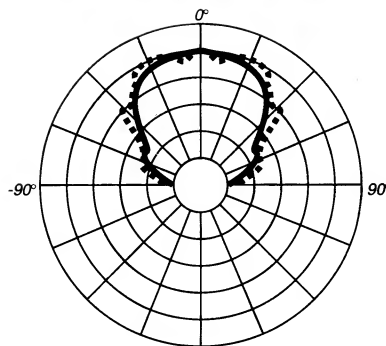
4.0 kHz —
5 kHz



6.3 kHz —
8 kHz



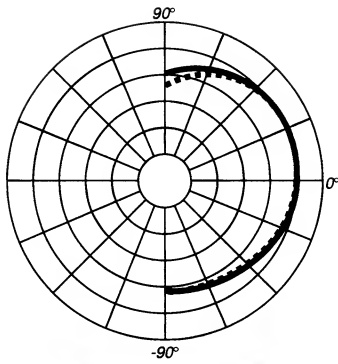
10 kHz —
12.5 kHz



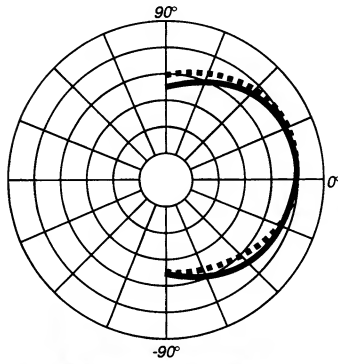
16 kHz —
20 kHz

VERTICAL POLAR PATTERNS

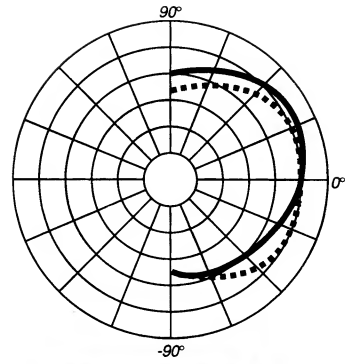
6 dB per division



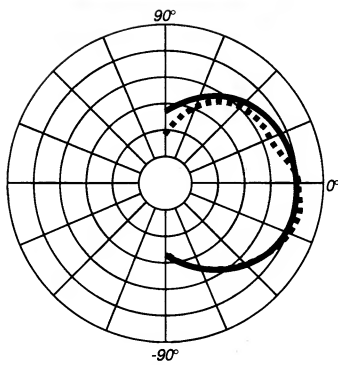
250 Hz —
315 Hz



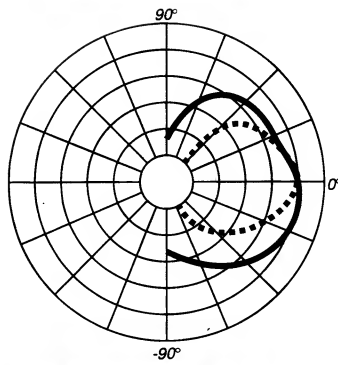
400 Hz —
500 Hz



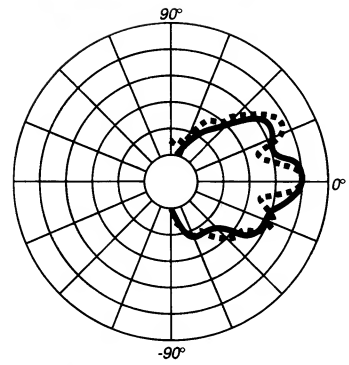
630 Hz —
800 Hz



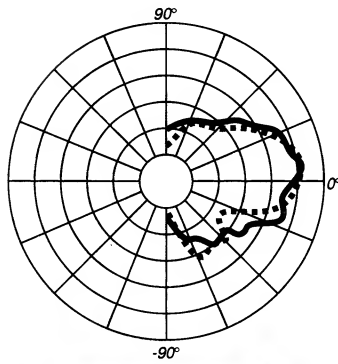
1 kHz —
1.25 kHz



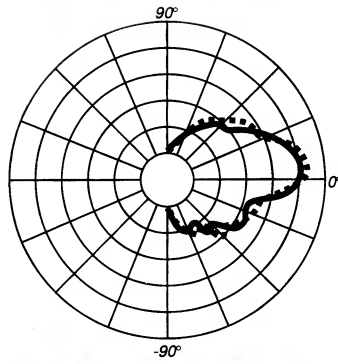
1.6 kHz —
2 kHz



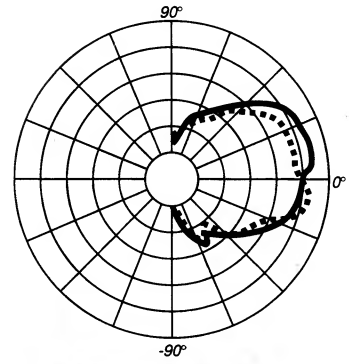
2.5 kHz —
3.15 kHz



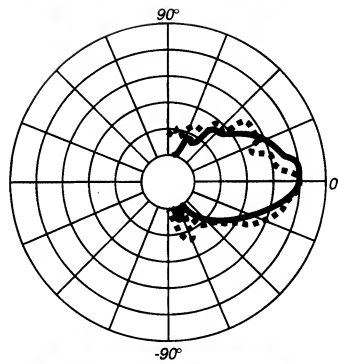
4 kHz —
5 kHz



6.3 kHz —
8 kHz



10 kHz —
12.5 kHz



16 kHz —
20 kHz

HARMONIC DISTORTION

Second and third harmonic distortion versus frequency is plotted at two power levels: 1/10 of rated input power and either 1/100 of rated input power or 1 watt, whichever is higher. Distortion is read from the graph as the difference between the fundamental signal and the desired harmonic. As an example, distortion that is 40 dB down from the fundamental signal is equivalent to 1% distortion.

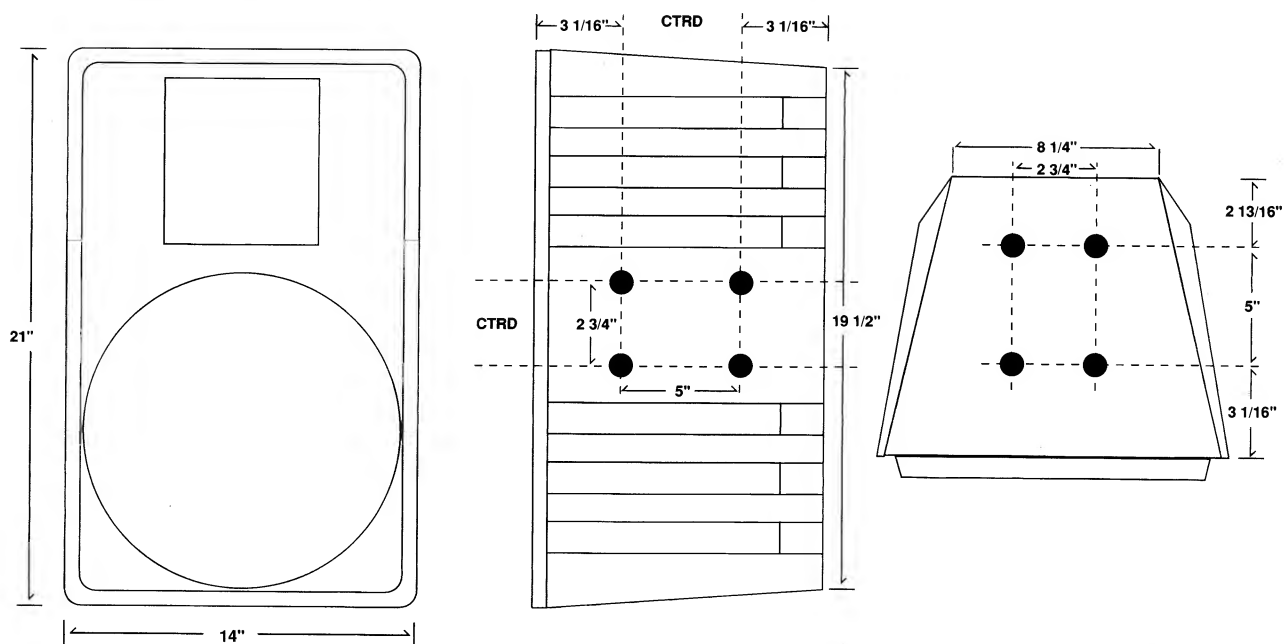
ARCHITECTURAL & ENGINEERING SPECIFICATIONS

The loudspeaker system shall have an operating bandwidth of 58 Hz to 18 kHz. The output level shall be 94 dB when measured at a distance of one meter with an input of one watt. The nominal impedance shall be 8 ohms. The continuous power handling shall be 200 watts, maximum program power of 400 watts, with a minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 90 degrees in the horizontal plane and 40

degrees in the vertical plane. The outside dimensions shall be 14 inches wide by 21 inches high by 11 3/4 inches deep. The weight shall be 31 lbs. The loudspeaker system shall be a Peavey model Stadia™ II.

ONE-YEAR LIMITED WARRANTY NOTE:

For details, refer to the warranty statement. Copies of this statement may be obtained by contacting Peavey Electronics Corporation, P.O. Box 2898, Meridian, Mississippi 39302-2898.



Dimensional Drawing / Mounting Points

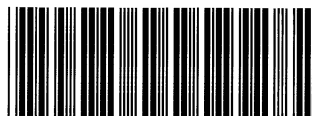
PEAVEY®

Features and specifications subject to change without notice.

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